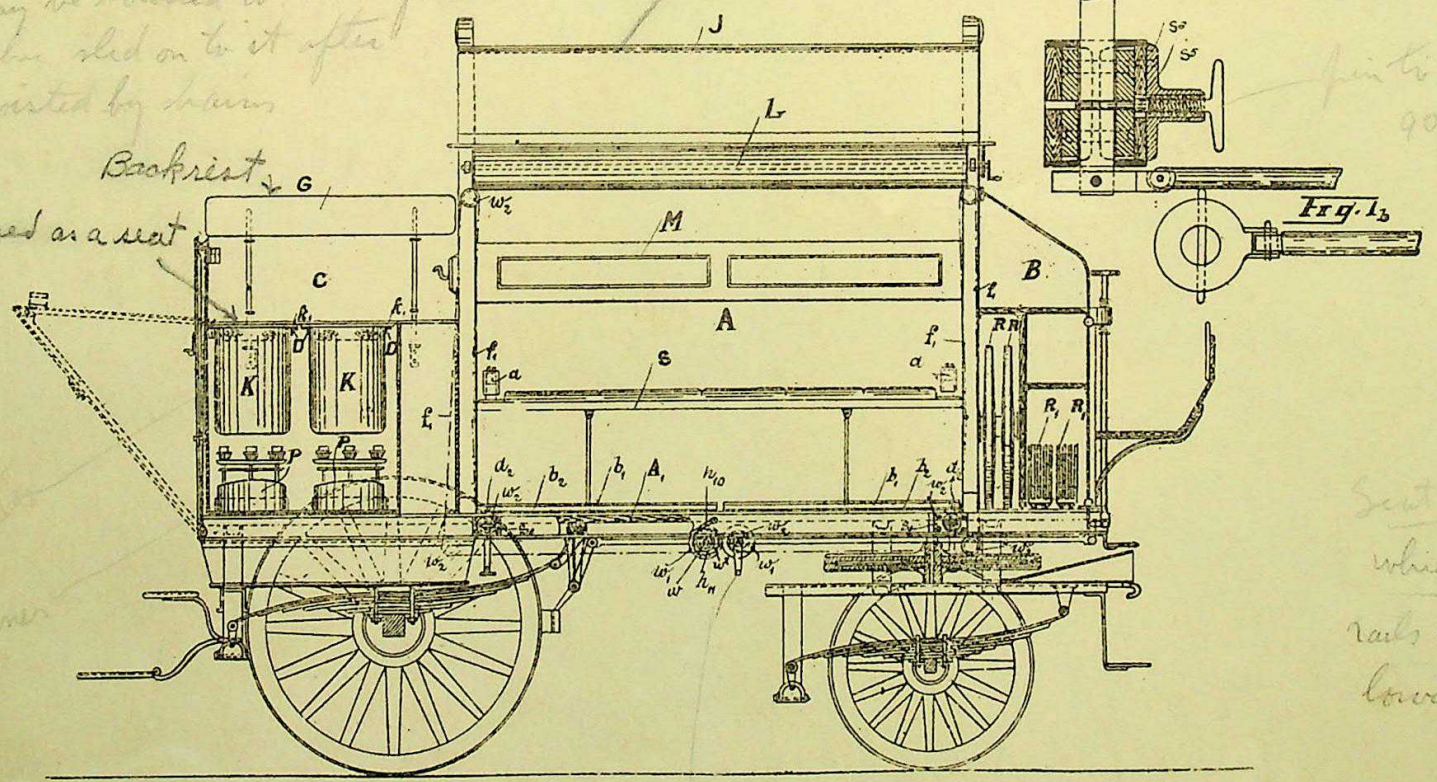
A.D. 1896. May 21. N° 10,907.
GOLDSCHMIDT'S Complete Specification.

(6 SHEETS SHEET 1)



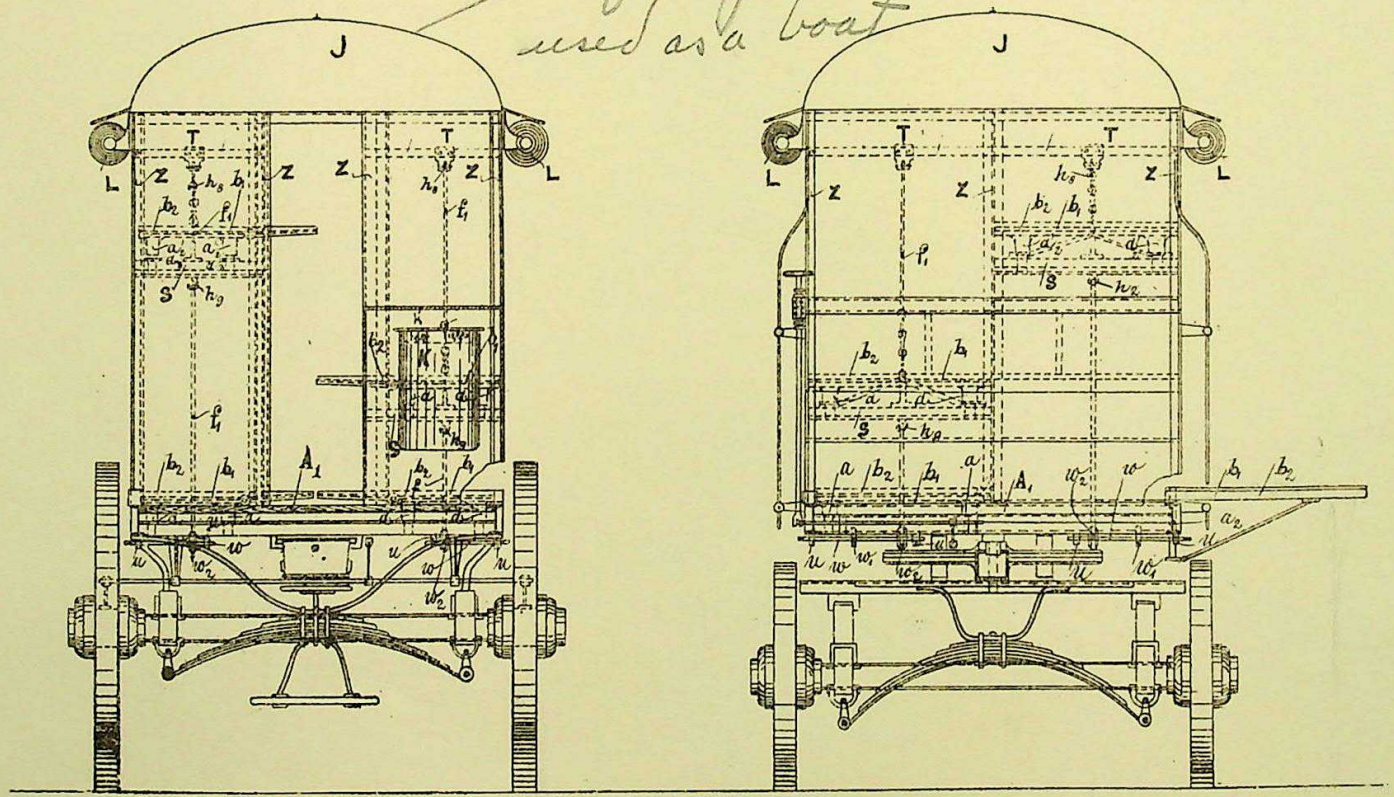
A.D. 1896. May 21. Nº 10,907.
GOLDSCHMIDT'S Complete Specification.

6 SHEETS
SHEET 2

Fig. 2

Roof may be used as a boat

Fig. 3



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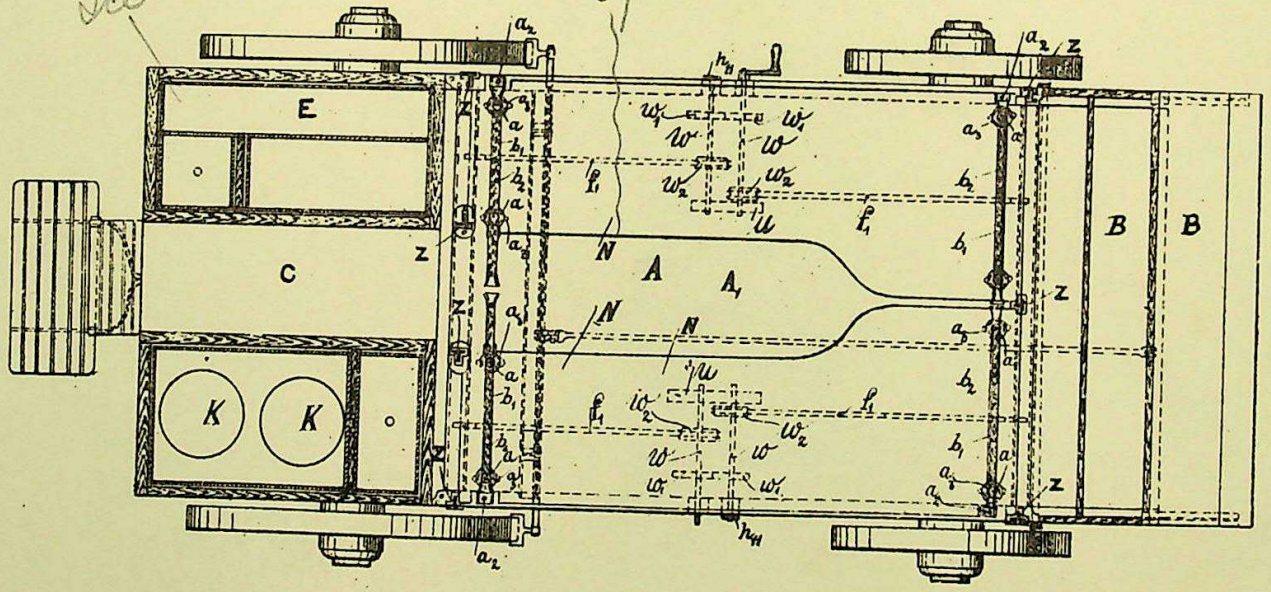
Sheet 3

Fig. 4.



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GOLDSCHMIDT'S Complete Specification.

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SHEET 2.

Fig. 5

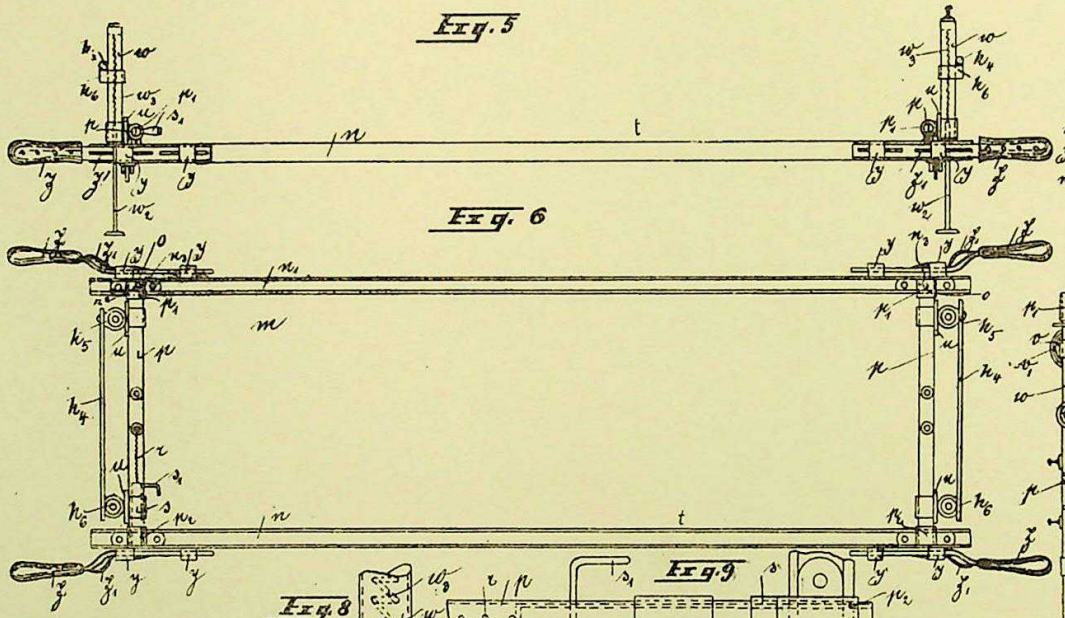


Fig. 6

Fig. 7

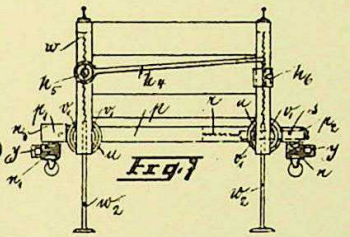


Fig. 8

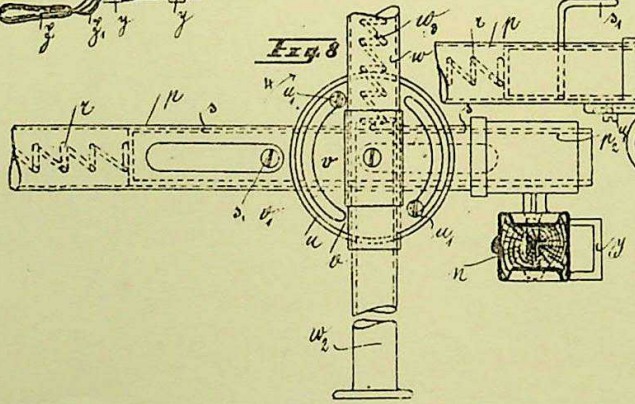


Fig. 9

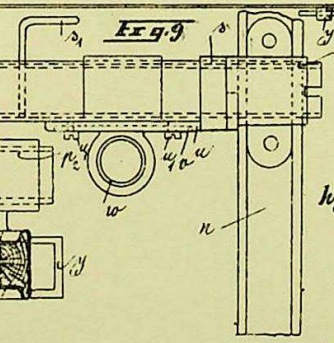


Fig. 11a

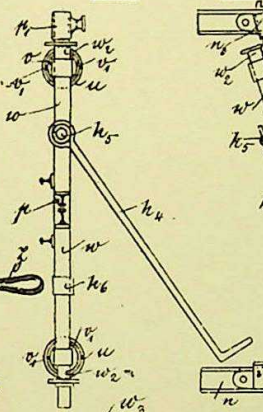


Fig. 11

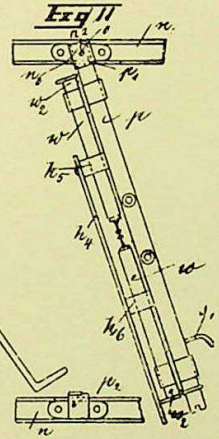
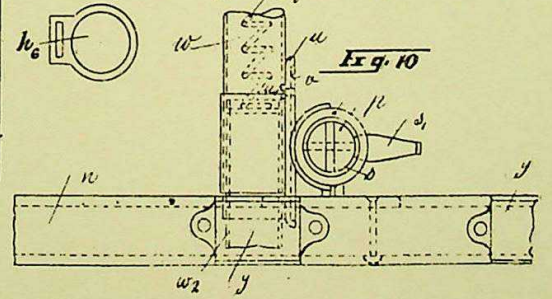


Fig. 12

Fig. 10



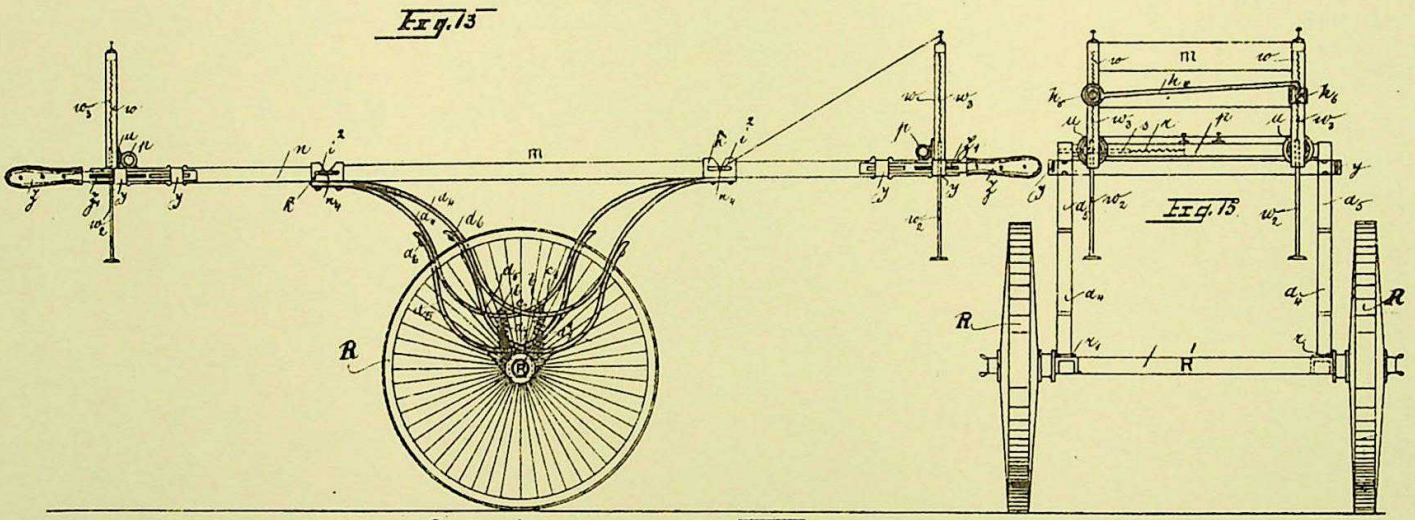


Fig. 13
Fig. 15

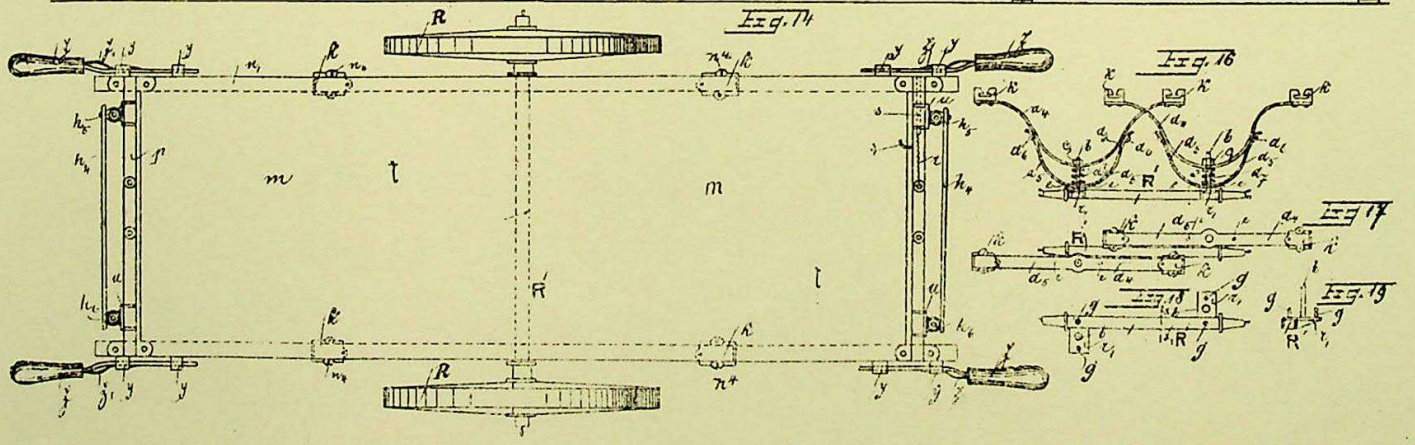


Fig. 14
Fig. 16
Fig. 17
Fig. 18
Fig. 19

The tubes are used as side walls

Fig. 21.

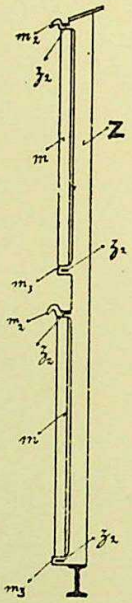
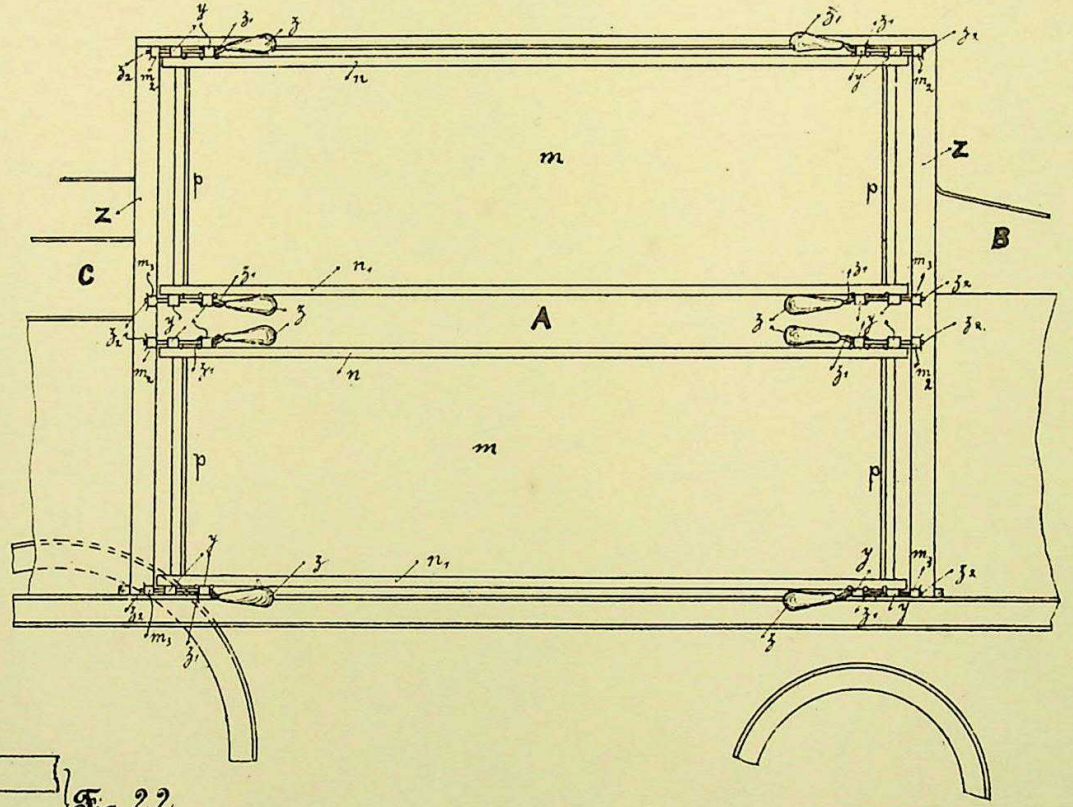


Fig. 20.



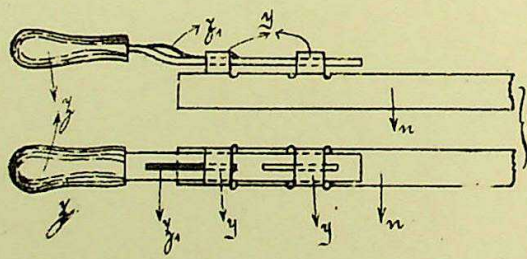


Fig. 22

Dr 10

N° 10,907 A.D. 1896

Date of Application, 21st May, 1896—Accepted, 21st May, 1897

DUPLICATE

COMPLETE SPECIFICATION.

Improvements in Ambulance Waggons or Carriages.

I, KARL GOLDSCHMIDT, of 131 Franz-Josefstrasse, Brünn, in the Empire of Austria, Manufacturer, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement :—

The subject of the now presented invention is a sanitary ambulance waggon or carriage having the following advantages chiefly.

1. The best possible utilization of the space.
2. Arranged so that the sides of the compartment destined for the wounded comprise stretchers which can be put together.
3. A convenient arrangement for putting the wounded into the carriages.

The sanitary ambulance waggon is represented upon the accompanying drawings.

SHEET 1.

Fig. 1. Side view partly in section of the complete waggon and details are shown in Fig. 1^A and 1^B.

SHEET 2.

Fig. 2. Back view of the waggon.
Fig. 3. Front view of the waggon.

SHEET 3.

Fig. 4. Plan view of the waggon.

SHEET 4.

Fig. 5. A side view of the stretcher for carrying by hand.
Fig. 6. A plan view of same.
Fig. 7. A back view of same.
Figs. 8, 9 and 10. Details (parts) of Figs. 1 to 3.
Fig. 11. Back view of the turned over tubes w with the feet w^2 drawn in and hook (or hooks) h^4.
Fig. 11^A. Plan view of Fig. 11.
Fig. 12. The eyelet hole h^6.

SHEET 5.

Fig. 13. A side view of stretcher m connected to the wheel frame.
Fig. 14. A plan view of Fig. 13.
Fig. 15. A back view of Fig. 13 showing the stretcher on the wheel frame.
Fig. 16. A side view of the springs and axles when they lie parallel to each other.
Fig. 17. A plan view of Fig. 16.
Fig. 18. A plan view of the axle R^1 without springs.
Fig. 19. A section of Fig. 18 (on x—x^1).

[*Price* 8*d.*]

SHEET 6.

Fig. 20. shows the manner of securing the stretchers *m* when employed as side walls.

Fig. 21. A side view of Fig. 20.

Fig. 22. A detail showing the manner of fastening the grip to the stretcher handles.

The sanitary ambulance waggon consists essentially of a centre part A, the front part B and the hind part C. The front part B and the hind part C are constructed in the most suitable manner in so far that the utensils requisite for sanitary purposes or for caring for the invalids are placed away in the best manner, in this same manner the wheels R and the axles R^1 for hand ambulance or stretcher, various sanitary utensils *etcetera* are disposed of in the compartments of the front part B. The hind part C is divided into three vertical spaces in the left hand space the ice box E and in the right hand space the kettles K as well as a petroleum holder have been fitted. Here may be mentioned that the kettles K rest with their turned over rims k^1 upon the angle iron D and that the petroleum burners P are below them which enables the boiling to be made possible during driving.

Above these compartments on the left and right is a reclining place for slightly wounded and on both sides a support G has been fixed.

The roof J of the ambulance waggon can be taken off and so arranged that the roof J may be used as a boat. Under the roof J of the centre part A the sheets L which can be rolled up, are arranged on both sides of the waggon ; besides these the boards M are also attached to both sides of the centre part A.

On the floor A^1 of the centre part A there are the leaves N, of the dressing tables, provided with turn over feet ; these can be drawn out to serve as dressing tables.

Fastened to the exterior corners of the floors A^1 bolts a^2 are fastened, round which the buffer covers *a* provided with an enlarged base plate a^3 are bedded so as to allow of their revolving. In the cover *a* a spring is inserted and on its top end a cap encircling the cover *a*. The guide rail b^2 fastened to the cap has a groove b^1 into which the stretcher may be placed for being pushed into the waggon. In the centre part A, seven T-shaped standards Z reaching from the floor A^1 to the roof J are arranged, between which boards S for sitting on (and fitted with rollers to their corners) which are connected to the chains f^1 move up or down, and upon which either slightly wounded may sit or severely wounded be bedded lying on stretchers. To the four corners of the seat boards S similar buffers with covers *a* are screwed and are connected together in pairs by means of similar guide rails b^2. In the bearings *u* which are fastened to the underside of the waggon floor the shafts (axles spindles) *w* are fastened to allow of their revolving, these axles are on their projecting ends shaped into a square. On these shafts *w* are toothed wheels w^1 and chain pulleys w^2 the former of which gear with each other. Around the latter w^2 runs a chain f^1 one end of which fastens to the hook h^8 fixed to the traverse T and the other end hooks on to a hook h^9 fastened to the seat board S.

On putting a handle upon the square end of the shaft *w* and turning round, then the chains f^1 roll themselves round the pulleys w^2 raising the seat board to any desired height. It is fixed at the required height by dropping the pawl h^{10} into the ratchet wheel h^{11} which is keyed upon the shaft *w*.

To put the stretcher into the waggon the rails b^2 must be turned out about 90° in this position they become secured by the dropping of pins s^5 into a hole bored into the bolts a^2. The pin s^5 goes into a case s^6 which rests on the floor of the waggon, as a fixture and partly encloses the bolt a^2. The stretcher is placed into the guides of the rails b^2 and pushed into the waggon either upon the seat board S let down or upon the floor of the waggon A^1. Of course the arrangement has been made in such a manner, that the rails b^2 fastened to the seat board S lie on a level with the turned out rails b^2 when the board is as low down as possible.

Also the stretcher must be first put on the seat board S in order to be able to bed on the floor A^1 after the raising of the board.

The stretchers m forming the side walls of the middle part A consist essentially of the longitudinal bars n n^1 the tubes p and the canvas t laid around the longitudinal bars n n^1. The connection of the bars n n^1 with the tubes p is made in the following manner.

Through the hole n^2 of the tube neck p^1 and the boring n^3 made in the longitudinal bar n^1 a bolt o is placed round which the connecting tube p revolves. In the tube p a spiral spring r is arranged fastened to which is a short tube s movable inside the tube p and projecting from it. This tube s has a knob or handle s^1 which projects through a longitudinal slit in the tube p and allows of the tube s being pushed into the tube p whilst the spring r has the tendency to push the tube s out of it. The projecting end of the tube s projects when required into the holes bored in the bracket r^3 on the bar n. When the stretcher has to be folded up the tubes s must be pushed into the tubes p by means of the hand grip s^1 the latter turned down and the now slack canvas t rolled round the bars n^1 n.

To each connecting tube p (see also Figs. 8, 9 and 10 enlarged details) a disc u is fastened against which another disc v provided with a slit v^1 is placed. In the disc u pins u^1 have been inserted in such a manner that they project through the slit v^1 of the disc v which is held fast by the heads of the pins u^1. The tubes w are fixed to the discs v and can be turned round in the direction of the arrow 4 Fig. 8 as the slits v^1 allow of the discs v being turned. The tubes w are fixed in a vertical position by the bent over end of the hook h^4 which turns round the bolt h^5 falling into the eyelet h^6. The two tubes are connected by means of canvas which serves on the one side as a rest for the feet and on the other as a support for the head and to assist the latter a second canvas sheet is spread from the canvas t to the upper ends of the tubes w.

Inside the tubes w are movable tubes w^2 which can be drawn out and may then be employed as feet for the stretcher or litter. These feet are connected with a spring w^3 arranged in the tube w whereby the feet w^2 are drawn into the tube w. These feet when required are pulled by hand out of the tube w and may be fixed in any desired manner; as for instance by horizontal holes bored in the feet w^2 in which a pin could be inserted the ends of which projecting on either side of the feet would bear against the end of the tube w.

At the ends of the longitudinal bars or rods n n^1 eyelets or rings y are fitted in which the carrying handles z of the stretchers may be inserted. These see Fig. 22, are provided with a spring z^1 which holds them fast in the eyelets y. There are besides this on each longitudinal bar n n^1 two pins n^4 which are to serve the purpose of being inserted in the slit i^2 of the springs a^4 and a^5 of the wheel frame and so connect the stretcher m with the wheel frame.

The stretcher wheel frame consists of the wheels R the axle R^1 with thickened parts r^1 the springs a^4 and a^5 and the spindles b and pins g fastened upon the thickened parts r^1. Between the springs a^4 and a^5 are two helical springs a^7 held upon the spindles b by the nuts c^1. The springs a^4 and a^5 are held together by bolts a^6. Kneepieces k are screwed on to the ends of the springs a^4 and into them the longitudinal bars n and n^1 of the stretcher m.

The wheel frame for the purpose of going well into a small space when not in use, may be arranged into the position shown in Figs. 16 and 17 when the springs a^4 and a^5 lie on a level with the axle R^1. To mount the stretcher for use the springs a^5 must be pressed upwards towards the springs a^4 next both springs be turned round about 90° and until the holes e in the latter are exactly over the pins g. Now loosen spring a^5 and the pins g drop into the holes e in them and fix the springs a^4 a^5 in the position proper for receiving the stretcher. To put the frame together, reverse the action, *i.e.* the springs a^5 are by compression detached from the pins, and next by turning them brought on a plane with the axle R^1.

In case the stretchers should be wanted to be used as side walls for the centre part A of the sanitary waggon, then the feet w^2 are in the first instance drawn in, the tubes

are folded over and the carrying handles z drawn out. Attached to the pillars Z of the sanitary ambulance waggon there are, (see Figs. 20 and 21), on each four knee shaped hooks m^2 and also on each four eyelets m^3. Then put the handles z (the two on the same side always) of each of the stretchers the wrong way about into the eyelets y Fig. 20 and hang each stretcher upon the knee pieces m^2 by the projecting ends z^2. Next the other handles z are placed the wrong way about into the eyelets y when their projecting ends z^2 fall into the eyelets m^3 and in this manner secure the carrying bier in its proper position.

Having now particularly described and ascertained the nature of the said invention and in what manner the same is to be performed, I declare that what I claim is :—

1. A sanitary ambulance waggon within which a stretcher burdened with severely wounded can be accommodated either upon the floor A^1 or upon a seat board S adjustable in height between T uprights Z and from the sides particularized by rails b^2 fastened to the floor a^1 upon enclosed buffers a^3 and revolving upon bolts a^2 ; in the guides b^1 of which the stretcher is inserted to be pushed into the interior of the waggon, whilst for the purpose of laying a stretcher upon the seat board S lowered to the floor the enclosed buffer a^3 and the rail b^2 are turned outwards (Fig. 3) so as to place the stretcher into the guides of the rails b^2 and then to push it along these rails arranged on a level with the rails b^2 fitted to the seat board S when the board may be lifted to any required height by unrolling the chains f^1 on the pulley wheels w^2 substantially as described.

2. In an ambulance waggon such as described in Claim 1 the arrangement for fixing or securing the raised seat-board S at any desired height comprising the drop check-catch h^{10} falling into the check wheel h^{11} at any height as required.

3. In an ambulance waggon such as referred to in Claims 1 and 2 the arrangement of hooks m^2 and eyelets m^3 which permits of the stretcher handle ends z^2 to be either hung thereon or to be pushed into position for the purpose of using the stretchers as sides for the centre part A of the waggon.

4. The stretchers m consisting of the longitudinal rails n and n^1 and the tubes p capable of swivelling upon pins or bolts which extend the canvas t secured to the rails n and n^1 and are held in position by the tubes s which slide within them, dropping into the socket p^2 upon the rail.

5. The arrangement on the stretcher referred to in Claim 4 of a hook h^4 swivelling upon the bolt h^5 the bent end of which drops into the eye h^6 to fix the tubes w in a vertical position.

6. A folding frame arrangement for the stretcher referred to in Claims 3, 4 and 5 constructed with springs a^4 a^5 loosely set upon the spindles b and held in position, at right angles to axles R^1 by pins g which fit into the holes e in the springs a^5 substantially as and for the purpose described and shewn.

Dated this 19th day of May 1896.

WM. P. THOMPSON & Co.,
Manchester, Liverpool, and London, Patent Agents.

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